I waited again for the expulsion of the placenta, but was disappointed, as in a few minutes another boy came forth with the membranes, like the two preceding, entire. This child was remarkably pale and weak. I treated it in the same manner as the other boy, and had the satisfaction to see it improve very much before I left the house. It was, however, the least vigorous of the three.

The placentæ, two in number, were expelled in five minutes after the birth of the last child. The boy and girl first born were attached to the larger placenta, and the last boy to the smaller, which was the last expelled. The children were all doing well when I left the house. For the mother, I ordered the ordinary camphorated solution of sulphate of morphia, two grains to the ounce, of which she was to take a teaspoonful every two hours until sleep was induced.

The expulsion of the children and placentæ did not occupy more than twenty minutes. The woman never had a plural birth before; her husband's

sister had twins on one occasion.

Nov. 7th. Saw Mrs. O'C. this morning at ten o'clock. She had passed a comfortable night; this morning, however, she was seized with nausea and vomiting. Great prostration followed, and I found her hardly able to speak. I prescribed for her a half grain of opium, conjoined with one of calomel, every two hours, intending to see her in the evening.

This woman had no milk, but a neighbour who had been recently confined was suggested to me as a person who would nurse the children temporarily. I had, therefore, ordered the woman who acted as nurse to apply to her, but she neglected to do so. The children being naturally weak, having been without food for fourteen hours, and also poorly clad, were cold and debilitated; in fact, the fingers of one were blue with cold. I insisted on their being fed, in no gentle tone, before I left.

I called in the evening to see them, but the gentleman who had been engaged to attend the woman had taken charge of the case. I would have weighed these children, and suggested it to the mother, but she gravely informed me "she never had but one weighed, and all the children were healthy but him, and he had had a sore neck ever since." Of course, I urged the matter no further. The parents were wretchedly poor.

11th. I have since learned all the children are dead. The boys died on the 8th—one in the morning, the other at night; the girl died on the evening of the 9th. If these children had been properly cared for by the

parents, the result might have been different.

PHILADELPHIA, December, 1861.

## DOMESTIC SUMMARY.

Vesico-Vaginal Fistula; Spontaneous Relief. "The American Operation."—[Read before the Obstetrical Society of Boston, by B. E. Cotting, M. D., Cor.

Secretary of the Society.]

Vesico-Vaginal fistula has been justly called a lamentable accident. Its consequences are truly deplorable; the remedy difficult, and, until recently, very uncertain. Spontaneous recovery, a result hardly to be hoped for, is a mere possibility. As an instance of such unexpected good fortune, the following case seems worthy of record.

In January, 1844, the patient, aged 33 years, was delivered of a first child.

after a labour of five days without intermission. On the third day her medical attendant left her, because she would not allow the forceps to be used. After he left, she got no attendance until the last moment of her labour, when she had the assistance of a midwife. During the five days she was not conscious of having passed any urine. Before the removal of the placenta, the water was drawn, and the catheter was used at proper intervals afterwards. On the third day after delivery, however, she found that she had no control over the bladder. After this, all the urine came away involuntarily and without cessation.

Having been called at this stage of the case, I found a sloughy opening from the vagina into the bladder, nearly an inch above the neck of the latter, large enough to admit the tips of two fingers. The catheter passed readily from the bladder into the vagina. The nature of the case, thus clearly made out, was explained to the patient; and she was informed that, after her recovery from confinement, means for permanent relief might be tried with reasonable chances of success. From time to time thorough explorations were made; and the case on the whole was considered a promising one for a surgical operation.

This was in 1844, and I was led to take this view of the matter, because I had been either an observer or an assistant at most of the operations for this accident performed previously, or about that time, by Dr. George Hayward, Sen., of Boston. But the patient resolutely refused to submit to any operation, in spite of earnest and repeated persuasion, and at length declined all further interference; having, from the first, allowed examination very reluctantly. All unusual interest in the case therefore subsided; and for a long time after, nothing was heard of the patient, except that she was in a wretched condition.

Seventeen years having passed, I accidentally, a few days ago, met with this patient, and obtained from her some particulars of her history subsequent to her misfortune.

She had never been pregnant since, though she says that she knows of no reason why she should not have had other children. For three years or thereabouts, after the accident, she was unable to retain the least accumulation of urine, the dribbling having been constant and unceasing. In a word, she suffered all the discomforts and loathsomeness ordinarily attendant upon such accidents. She afterwards began to experience some slight power of retention, and this continued to increase, very gradually, until she had almost or quite acquired complete control over her urine. For the last three or four years, and since her catamenia have ceased, she has been able to retain and pass her water, as she says, "as well as any body." She goes to church and other public places without apprehension, though after several hours she sometimes feels uneasy and fears consequences. She has not, however, suffered from too long retention up to this time. She affirms that she is completely restored, and perfectly well.

On partial digital examination, which she very reluctantly permitted, there were noticeable deep corrugations and contraction about the place of the former opening; and the upper part of the septum appeared to overlap the under. No communication with the bladder could be discovered by the finger; but whether it was completely obliterated, or, if any, how large the opening might be, could not be ascertained with absolute certainty, as she repelled the introduction of the catheter—seizing the instrument and preventing further exploration. At any rate, the injury has been completely repaired, and the patient relieved of her miserable state and restored to a comfortable existence.

In looking up and reviewing a case like the foregoing, which terminated so fortunately, one is naturally led to reflect on the great difficulties formerly attendant on efforts to remedy such accidents, and to call to mind some of the circumstances of the earlier operations performed by Dr. Hayward, particularly those original and scientific devices of his, which have rendered subsequent operations so much more successful; and which, having been accepted by such men as Professor Verneuil and M. Robert, of Hôtel Dieu, have given to the method abroad the name of "The American Operation."

An account of some of these improvements is worth repeating—for their own intrinsic value, and more especially now as they do not seem to be fully appreciated or properly acknowledged by some, whose success, whatever it may be,

should be attributed to the more or less complete adoption of these improvements; and moreover as, in certain localities, they appear to be in danger of being overlaid by accumulating heaps of pretended discoveries and inflated

assumptions.

Bearing in mind that when the first case presented itself to Dr. Hayward, in 1839, there had not been a successful operation in this country, and very few anywhere; that little or no assistance in the details of such an operation could be obtained from any source; that troublesome and alarming symptoms had arisen from sutures carried through the walls of the bladder, as previously thought necessary; that danger and even death had occurred from hemorrhage—bearing in mind these and other formidable obstacles on the one hand, and the confessedly slight chance of success on the other, we shall have a better conception of the great service Dr. Hayward rendered, in planning and executing, on strictly scientific principles, a new, safe, and successful method of operating for the relief of this accident.

And first, by passing a large, smooth, and inflexible staff through the urethra beyond the fissure towards the fundus of the bladder, and using this staff as a lever, the pubes being the fulcrum, he showed that the bladder could be brought forward until the fistulous opening came quite within reach and sight. This movement originated with Dr. Hayward. It can be effected without difficulty; and, even before the use of ether as an anæsthetic, caused no very considerable amount of inconvenience or pain. Now, of course, whenever ether is resorted

to, the last and only objection is entirely obviated.

The parts having thus been rendered accessible, Dr. Hayward's next and chief improvement consisted in superficially but thoroughly paring the edges of the fistula without cutting deeply into the walls of the bladder, and more particularly in dissecting or splitting up the vaginal membrane around the opening for the distance of a few lines, in order to have broader surfaces to be placed in contact; thereby increasing the chances of adhesion, while the danger of hemorrhage, the result of deeper incisions, was greatly diminished. In fact, the bleeding was in this way reduced to the merest trifle, and the loss of substance, always to be avoided, rendered so inconsiderable that it need not be taken into account.

A third and very great improvement, introduced by Dr. Hayward, was the passing of small sutures; and these through only a portion of the thickness of the pared parts—not through the walls of the bladder. Thus, inflammation of this organ, as experienced by previous operators, was completely averted.

In his first cases, Dr. Hayward removes the stitches a few days after the operations; but having in one instance, at least, which I happened distinctly to witness, reopened an already united wound by pressing too suddenly on the staff in his endeavour to get at the most distant suture, he allowed in some of his subsequent operations the threads to remain until spontaneously cast off. Left in this way, the threads caused no trouble whatever, usually coming away in from seven to ten days. In one instance one remained twenty-eight days without inconvenience or injurious effect—so that this course may be adopted whenever it

may be difficult to reach or to remove the stitch.

Ås so much has been said, from time to time, since the publication of Dr. Hayward's method and success—now on the varied contrivances for securing and retaining the sutures, again on their number and size, and still more on their material, till "lo! a new era dawns"! and we have "the great surgical achievement," "the imperishable discovery" of the silver suture (though unfortunately for our country's vaunted glory in the matter, this "result of a Providential train of circumstances" occurred fifteen years after silver sutures had been in use in England, been advocated there on precisely the same grounds, and even been employed in a successful operation for vesico-vaginal fistula, as reported in vol. xxx. of the London Lancet); and as there is no little danger in all this clamour about clamps, buttons, shot, and other equally unimportant mechanical contrivances, that the true scientific principles, which should guide in these

<sup>&</sup>lt;sup>1</sup> American Journal of the Medical Sciences, Philadelphia, July, 1839, vol. xxiv. p. 283. Boston Medical and Surgical Journal, April 16th, 1851, vol. xliv. p. 209.

operations, may be overlooked or disregarded—it may be well to remark in a word, and it needs but a word, that, wherever union by the first intention is looked for, the edges of the wound must be kept in close contact; and that, if this be skilfully done, it is of far less consequence by what peculiar contrivance it is effected. If sutures are used, more depends upon their proper adjustment, and their having the exact amount of tightening requisite, than upon the material. A metallic suture, of whatsoever or whomsoever's make, if imperfectly secured or too tightly tied, will prove as ineffectual or will cut its way out as certainly as that made of silk or flax. A delicate thread, even of cotton, properly adjusted, will retain its place, cause as little irritation, and leave as small a scar, as we have often had occasion to notice in operations about the face, as the purest silver, the softest iron, or the most polished steel. Let each operator, then, use whichever suture, knot, or fastener he himself chooses or can, in a given case, best manage, just as he would select any particular form of scissors or knife for paring the opening; but let him not forget the principles on which he must depend for success. The former, though perhaps not the best, may answer if adroitly used, but a neglect of the latter will result in inevitable failure. having, by such a course, been successful, let him not, in his report of the case, as is too often done, wholly ignore the first demonstrator of these principles an act of simple justice; while magnanimity would suggest an honourable men-

The position of the patient during the operation is of some consequence, though it may occasionally be varied to suit the convenience, or even the whim, of the operator. Dr. Hayward adopted that of lithotomy, which has many advantages. The fistulous opening, naturally thrown forward by this position, can thus without difficulty be brought by the staff nearly or quite to the os externum, and the subsequent steps of the operation thereby greatly facilitated. In this way too, an assistant, on either side, can with one hand keep the leg in proper position, and with the other separate the labia with a suitable spatula, without being in the way of the operator, who stands in front of the patient. Besides, the patient is in the most comfortable posture for a prolonged operation, and can thus take ether when and as long as desirable.

The catheter for after use, contrived by Dr. Hayward, is, to say the least, quite as good as any of its imitations; while its advantages are the plate which enables it to be secured by a bandage, and the screw which allows the additional portion to be turned in any desired direction, or to be removed at pleasure.

Much more might be added, but enough has been said for the present purpose, which is, simply, a short exposition of the principal improvements, based on which, the operation for vesico-vaginal fistula is hereafter to become one of the successful operations of surgery. Having had the opportunity to be present and to assist in the earlier cases, I can bear testimony to the difficulties encountered, and to the original as well as successful means adopted to surmount them—a grateful testimony to the merited eminence of a faithful instructor and steadfast friend.—Boston Med. and Surg. Journ., July 11, 1861.

Affection of Vision from Spinal Irritation.—The following cases, related (Berkshire Medical Journal, July, 1861) by Dr. A. H. Robinson, of Concord, N. H., are highly interesting, though so far as we can judge, from the very imperfect account of the symptoms, the disease from which the patients suffered, seems to be improperly designated amaurosis.

"About two years ago, my attention was called to the case of two young ladies—sisters—who, while attending school at an institution in this county, were both attacked with symptoms of amaurosis; which became so severe as to force them to leave school, and live secluded from the light. At the time of my first seeing them, these girls had been some months under treatment, and their health had in a measure improved. The lower cervical and upper dorsal vertebre in each were exceedingly tender on pressure; and as this tenderness abated under local treatment, the pain in the eyes and the intolerance of light subsided; and as the soreness of the spine increased, so did the amaurotic symptoms; and thus the one appeared to be the mark of the severity of the other.

"A few months after seeing these young ladies, my own son, a lad of eleven